

CLAIMS:

1. Receiver (1,11) comprising
 - a receiving stage (2,12) for receiving frequency signals;
 - a mixing stage (3,13) coupled to the receiving stage (2,12) for generating converted frequency signals;
 - 5 - a modulating stage (4,14) coupled to the mixing stage (3,13) for delta-sigma modulating the converted frequency signals; and
 - a filtering stage (5,15) coupled to the modulating stage (4,14) for filtering the delta-sigma modulated converted frequency signals.
- 10 2. Receiver (1,11) as defined by claim 1, wherein the modulating stage (4,14) comprises a delta-sigma modulator (41,42,43,90) comprising
 - a low-pass filter (91);
 - a quantiser (92) coupled to the low-pass filter (91); and
 - 15 - a digital-to-analog converter (93) for feeding back an output of the quantiser (92) to an input of the low-pass filter (91).
3. Receiver (1,11) as defined by claim 2, wherein the low-pass filter (91) comprises a time-continuous filter.
- 20 4. Receiver (1,11) as defined by claim 1, further comprising
 - a further mixing stage (6,16) coupled to the filtering stage (5,15) for generating baseband signals; and
 - a further filtering stage (7,17) coupled to the further mixing stage (6,16) for channel selective filtering the baseband signals.
- 25 5. Receiver (1) as defined by claim 1, wherein the mixing stage (3) comprises a mixer (32), and the modulating stage comprises a delta-sigma modulator (41).

6. Receiver (11) as defined by claim 1, wherein the mixing stage (13) comprises a first mixer (34) for generating in-phase signals and a second mixer (35) for generating quadrature signals, and the modulating stage (14) comprises a first delta-sigma modulator (42) for delta-sigma modulating the in-phase signals and a second delta-sigma modulator (43) for delta-sigma modulating the quadrature signals.
7. System (100) comprising a transmitter (101) and comprising a receiver (1,11) which comprises
- a receiving stage (2,12) for receiving frequency signals;
 - a mixing stage (3,13) coupled to the receiving stage (2,12) for generating converted frequency signals;
 - a modulating stage (4,14) coupled to the mixing stage (3,13) for delta-sigma modulating the converted frequency signals; and
 - a filtering stage (5,15) coupled to the modulating stage (4,14) for filtering the delta-sigma modulated converted frequency signals.
8. Modulating/filtering stage (10,20) for use in a receiver (1,11) comprising
- a receiving stage (2,12) for receiving frequency signals;
 - a mixing stage (3,13) coupled to the receiving stage (2,12) for generating converted frequency signals;
 - the modulating/filtering stage (10,20) comprising a modulating stage (4,14) coupled to the mixing stage (3,13) for delta-sigma modulating the converted frequency signals and a filtering stage (5,15) coupled to the modulating stage (4,14) for filtering the delta-sigma modulated converted frequency signals.
9. Method for receiving frequency signals and comprising the steps of
- generating converted frequency signals;
 - delta-sigma modulating the converted frequency signals; and
 - filtering the delta-sigma modulated converted frequency signals.
10. Processor program product for receiving frequency signals and comprising the functions of
- generating converted frequency signals;
 - delta-sigma modulating the converted frequency signals; and

- filtering the delta-sigma modulated converted frequency signals.